

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1-8. Canceled

9. (Currently Amended) A vehicle, comprising:

an engine having a power output;

a power transfer device driven by said power output, said power transfer device including an input and an output axially offset from said input;

a load floor that runs from approximately a front of said vehicle to a rear of said vehicle;

a low profile suspension supporting said load floor on rear wheels;

a differential unit that drives said wheels and that is driven by said output; and

a single segment drive shaft that transfers drive torque between said output and said differential, wherein the differential unit is located at a rear axle of the vehicle, and said differential unit is a half-shaft differential unit immovably supported by a frame and having opposed swing axles extending from said differential unit to said wheels, said low profile suspension enabling said swing axles to move vertically independent of said differential unit;

and

a torque box positioned behind the rear axle of the vehicle so as to accommodate the differential unit and the swing axles, said torque box does not extend beyond the rear wheels.

10. (Previously Presented) The vehicle of claim 9, further comprising:

one of a gear drive, a belt drive and a chain drive disposed between said input and said output of said power transfer device, said one of a gear drive, belt drive and chain drive changing an input rotation ratio to an output rotation ratio.

11. (Canceled).

12. (Previously Presented) The vehicle of claim 9, wherein said low profile suspension includes:

first and second trailing arms pivotally mounted outboard of said load floor on opposite sides thereof;

a torsion box secured between said first and second trailing arms beneath said load floor;

an air spring system disposed between said torsion box and said load floor to support said load floor; and

first and second wheel support members extending upwardly of said first and second trailing arms to rotatably support said wheels.

13. (Withdrawn) The vehicle of claim 12, wherein said torsion box includes:

first and second transverse beam members secured between said first and second trailing arms beneath said load floor;

a first plate attached to said first and second transverse beams adjacent said first trailing arm;

a second plate attached to said first and second transverse beams adjacent said second trailing arm and spaced from said first plate;

a first cross beam secured to said first transverse beam substantially adjacent to said first plate and secured to said second transverse beam substantially adjacent to said second plate; and

a second cross beam secured to said second transverse beam substantially adjacent to said first plate and secured to said first transverse beam substantially adjacent to said second plate.

14. (Withdrawn) The vehicle of claim 13 wherein said air spring system includes a first air spring compressed between said first plate and said load floor urging said load floor upward from said torsion box and a second air spring compressed between said second plate and said load floor urging said load floor upward from said torsion box.

15. (Previously Presented) The vehicle of claim 12 wherein said low profile suspension further includes step-up gear drives that drivably interconnects said swing axles to said wheels.

16. (Currently Amended) A vehicle, comprising:
an engine having a power output;
a power transfer device driven by said power output, said power transfer device including an input and an output axially offset from said input;
a load floor that runs from approximately a front of said vehicle to a rear of said vehicle;
a low profile suspension resiliently supporting said load floor on rear wheels
a differential unit that drives said wheels and that is driven by said output, said differential unit having output axes that are vertically lower than axes of said wheels; and
a single segment drive shaft that transfers drive torque between said output and said differential, wherein the differential unit is located at a rear axle of the vehicle, and differential unit is a half-shaft differential unit immovably supported by a frame and having opposed swing axles extending from said differential unit to said wheels, said low profile suspension enabling said swing axles to move vertically independent of said differential unit; and

a torque box positioned behind the rear axle of the vehicle so as to accommodate the differential unit and the swing axles, said torque box does not extend beyond the rear wheels.

17. (Previously Presented) The vehicle of claim 16 further comprising one of a gear drive, belt drive and chain drive disposed between said input and said output of said power transfer device, said one of a gear drive, a belt drive and a chain drive changing an input rotation ratio to an output rotation ratio.

18. (Canceled).

19. (Previously Presented) The vehicle of claim 16 wherein said low profile suspension includes:

first and second trailing arms pivotally mounted outboard of said load floor on opposite sides thereof;

a torsion box secured between said first and second trailing arms beneath said load floor;

an air spring system disposed between said torsion box and said load floor to resiliently support said load floor; and

first and second wheel support members extending upwardly of said first and second trailing arms to rotatably support said wheels.

20. (Withdrawn) The vehicle of claim 19, wherein said torsion box includes:

first and second transverse beam members secured between said first and second trailing arms beneath said load floor;

a first plate attached to said first and second transverse beams adjacent to said first trailing arm;

a second plate attached to said first and second transverse beams adjacent to said second trailing arm and spaced from said first plate;

a first cross beam secured to said first transverse beam substantially adjacent to said first plate and secured to said second transverse beam substantially adjacent said second plate; and

a second cross beam secured to said second transverse beam substantially adjacent to said first plate and secured to said first transverse beam substantially adjacent said second plate.

21. (Withdrawn) The vehicle of claim 20 wherein said air spring system includes a first air spring compressed between said first plate and said load floor urging said load floor upward from said torsion box and a second air spring compressed between said second plate and said load floor urging said load floor upward from said torsion box.

22. (Previously Presented) The vehicle of claim 19 wherein said low profile suspension further includes step-up gear drives that drivably interconnects said swing axles to said wheels.

23. (Currently Amended) A vehicle, comprising:

an engine having a power output;

a power transfer device driven by said power output, said power transfer device including an input and an output axially offset from said input;

a load floor that runs from approximately a front of said vehicle to a rear of said vehicle;

a low profile suspension supporting said load floor on rear wheels;

a differential unit that drives said wheels and that is driven by said output, said differential unit having output axes that are vertically lower than axes of said wheels; and

a single segment drive shaft that transfers drive torque between said output and said differential and that runs horizontal with respect to the load floor, wherein the differential unit is

located at a rear axle of the vehicle, and said differential unit is a half-shaft differential unit immovably supported by a frame and having opposed swing axles extending from said differential unit to said wheels, said low profile suspension enabling said swing axles to move vertically independent of said differential unit; and

a torque box positioned behind the rear axle of the vehicle so as to accommodate the differential unit and the swing axles, said torque box does not extend beyond the rear wheels.

24. (Previously Presented) The vehicle of claim 23, further comprising:

one of a gear drive, a belt drive and a chain drive disposed between said input and said output of said power transfer device, said one of a gear drive, belt drive and chain drive changing an input rotation ratio to an output rotation ratio.

25. (Canceled).

26. (Previously Presented) The vehicle of claim 23, wherein said low profile suspension includes:

first and second trailing arms pivotally mounted outboard of said load floor on opposite sides thereof;

a torsion box secured between said first and second trailing arms beneath said load floor;

an air spring system disposed between said torsion box and said load floor to support said load floor; and

first and second wheel support members extending upwardly of said first and second trailing arms to rotatably support said wheels.

27. (Withdrawn) The vehicle of claim 26, wherein said torsion box includes:

first and second transverse beam members secured between said first and second trailing arms beneath said load floor;

a first plate attached to said first and second transverse beams adjacent to said first trailing arm;

a second plate attached to said first and second transverse beams adjacent to said second trailing arm and spaced from said first plate;

a first cross beam secured to said first transverse beam substantially adjacent to said first plate and secured to said second transverse beam substantially adjacent said second plate; and

a second cross beam secured to said second transverse beam substantially adjacent to said first plate and secured to said first transverse beam substantially adjacent said second plate.

28. (Withdrawn) The vehicle of claim 27 wherein said air spring system includes a first air spring compressed between said first plate and said load floor urging said load floor upward from said torsion box and a second air spring compressed between said second plate and said load floor urging said load floor upward from said torsion box.

29. (Previously Presented) The vehicle of claim 26 wherein said low profile suspension further includes step-up gear drives that drivably interconnects said swing axles to said wheels.